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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/575,902	04/14/2006	Ekkehard Roth	P29527	4685
7055 7590 10/09/2009 GREENBLUM & BERNSTEIN, P.L.C. 1950 ROLAND CLARKE PLACE RESTON, VA 20191				
EXAMINER HUDA, SAEED M				
ART UNIT		PAPER NUMBER		
1791				
NOTIFICATION DATE		DELIVERY MODE		
10/09/2009		ELECTRONIC		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

gbpatent@gbpatent.com  
pto@gbpatent.com

### Office Action Summary

**Application No.**

10/575,902

**Applicant(s)**

ROTH, EKKEHARD

**Examiner**

SAEED M. HUDA

**Art Unit**

1791

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 14 August 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-9 and 11-20 is/are pending in the application.
- 4a) Of the above claim(s) 14-20 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9 and 11-13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/S508)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 04/20/2009 has been entered.

***Response to Amendment***

2. Claims 1-9 and 11-20 are pending in this application. Claims 14-20 stand withdrawn.

***Response to Arguments***

3. The Examiner believes that the amended claim set has failed to define over the previously present prior art. Applicant has amended the claims to state that "the filler is of same actual material as the reinforcement fibers". In the previous action, Skinner et al. taught that the filler may be hollow microspheres of glass ([0008]) and the fibers may be glass ([0025]) (i.e. filler comprises the same actual material as the reinforcement fibers in that both are glass).

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

5. Claims 1-2 and 4 are rejected under 35 U.S.C. 102(a) as being anticipated by Skinner et al. (US 2004/0130067 A1).

a. Regarding claims 1 and 4, Skinner et al. disclose a method of molding a high density composite article which is composed of fiber reinforcement, resinous material, and fillers (abstract and [0005]) (fiber-composite article composed of fibers, resin, and fillers) that can be particulate (ground) or chopped strands (cut) ([0019]) where the resinous material is loaded with a filler ([0005]) (forming resin filler mixture). Skinner et al. teach that the filler may be hollow microspheres of glass ([0008]) and the fibers may be glass ([0025]) (i.e. filler comprises the same actual material as the reinforcement fibers in that both are glass).

b. Regarding claim 2, Skinner et al. teach the aggregate will have a particle size in the range of 0.05 mm to 5 mm ([0017]).

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 3, 5-6, 11, and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Skinner et al. (US 2004/0130067 A1) as applied to claim 1 above, and further in view of Taylor et al. (US 6461457 B1).

a. Regarding claim 3, Skinner et al. fail to explicitly teach the fiber size.

Taylor et al. teach a method of producing an elastic article formed into film shape (abstract) where said article can be loaded with fillers (column 2, lines 20-27).

Taylor et al. go on to teach that the thinned elastic article of the invention may be bonded to wovens, nonwovens, knits, nets, foam-like materials, paper, and tissue, thereby forming a laminate structure (column 8, lines 49-55). Thus, forming a product similar to that of Skinner et al.

Taylor et al. go on to teach that the fibers have an average diameter of 10 microns to 30 microns (column 3, lines 1-10). It would have been obvious to one having ordinary skill in the art at the time of the invention to use this fiber size in the invention of Skinner et al. because said fiber is of a size that can, after being meltblown, easily be carried in a high velocity air stream to be deposited on a collecting surface to a web (column 3, lines 15-25).

b. Regarding claim 5, Skinner et al. fail to teach that the resin filler mixture is processed into a film.

Taylor et al. teach a method for producing a stretch-thinned elastic article where said article is formed from a thermoplastic block copolymer that is melt-processed into a stretchable article such as a film. Said film articles if is made and formed of thermoplastic block copolymer loaded with a filler (column 2, lines 21-29). It would have been obvious to one having ordinary skill in the art at the time of the invention to process the resin filler mixture into a film because films

produced by this method are suitable for durable and disposable articles (abstract).

c. Regarding claims 6 and 11, Skinner et al. fail to teach that the resin filler mixture is applied to a semi-finished textile product that is in a form found in the claim.

Taylor et al. teach that the stretch-thinned articles (films) produced in accordance with the method of this invention may be bonded to facing materials including wovens, nonwovens, knits, nets, foam-like materials, paper, and tissue, thereby forming a laminate structure (column 8, lines 49-55) (semi-finished textiles structures). It would have been obvious to one skilled in the art at the time of the invention to use the film forming process of Taylor et al. in the invention of Skinner et al. because the film is dimensionally stable overtime and at elevated temperatures (column 2, lines 1-3), so shrinkage will not be an issue.

d. Regarding claim 13, the rejection for claims 2 and 3 above provide logic and reasoning for this rejection.

8. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Skinner et al. (US 2004/0130067 A1) as applied to claim 6 above, and further in view of Muser et al. (US 4556529).

Skinner et al. fail to teach the use of a mold to process layered components or that the resin filler mixture comprises a preform.

Muser et al. teach a method for bonding molded components (semi-finished textile products) to film, sheeting, or shaped members in which the molded element

constitutes plastic resin and filler, and is bonded to the sheeting or member. Muser et al. go on to teach that the sheeting or film is introduced into a mold and processed (abstract). The resin filler film can be in preform form. In the creation of a product that has resin filler film "skins", it would necessarily follow that the resin filler film would need to be introduced into the mold prior to the textile product. It would have been obvious to one skilled in the art at the time of the invention to use the mold and layered molding method to process the modified invention of Skinner et al. because such a method can be carried out simply and rapidly in production applications (column 1, lines 50-55).

9. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Skinner et al. (US 2004/0130067 A1) as applied to claim 1 above, and further in view of Minami et al. (US 3962009).

Skinner et al. fail to teach the use wherein the fiber composite material is applied into a component mold or onto a semi-finished textile product in a spray method or that the sprayed product is used for producing performs.

Minami et al. teach a method to apply a coat layer onto a composite materials where a resin composition mixed with a filler is spray coated (spray method) onto the composite. (column 11, lines 26-32). It would have been obvious to one skilled in the art at the time of the invention to use a spray method in the invention of Skinner et al. the spray method, as compared to a brush or roll method, does not require that the surface of the sample see pressure (i.e. with use of a brush or roll method, the surface of the sample will be subjected to force from the motion of brush or roll application; however, with a spray method, this is avoided).

10. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Skinner et al. (US 2004/0130067 A1) in view of Minami et al. (US 3962009) as applied to claim 8 above, and further in view of Zion (US 4025686).

Zion teach a resinous article and method for making said article where a body of fibrous reinforcing material and syntactic foam containing a low density filler are placed in a mold (abstract). The resulting article has an outer skin, a layer of fibrous reinforcing material beneath the skin bonded to the skin (abstract).

Zion teaches that almost any type of fibrous reinforcing material can be used to provide added strength to the finished article. However, it has been found in practice that a reinforcing material made from glass fibers is especially useful in making such molded articles. The glass fibers can be in a variety of forms when used to reinforce the resinous liquid. Continuous strand mats, chopped strand mats, chopped roving and preforms can all be used when a glass fiber material is used as the reinforcing material. However, the glass fibers or other reinforcing material should not be loose but they should be in a matrix form like a sheet or preform (column 6, lines 1-20). It would have been obvious to one having ordinary skill in the art at the time of the invention to produce preforms because this will allow the reinforcing material to adhere to the molds so it does not move out of position during the molding operation (column 6, lines 1-20).

11. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Skinner et al. (US 2004/0130067 A1) in view of Muser et al. (US 4556529) as applied to claim 7 above, and further in view of Zion (US 4025686).



Skinner et al. in view of Muser et al. are silent with regards to the resin filler film comprising a preform. Zion teaches a process where a resinous article, specifically said article is a composite type with made using a core and outer skins (abstract). In creation of said article, Zion teaches that continuous strand mats, chopped strand mats, chopped roving and preforms can all be used when a glass fiber material is used as the reinforcing material. However, the glass fibers or other reinforcing material should not be loose but they should be in a matrix form like a sheet or preform (column 6, lines 1-20). It would have been obvious to one having ordinary skill in the art at the time of the invention to produce preforms because this will allow the reinforcing material to adhere to the molds so it does not move out of position during the molding operation (column 6, lines 1-20).

### ***Conclusion***

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to SAEED M. HUDA whose telephone number is (571)270-5514. The examiner can normally be reached on 8:00 - 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steve Griffin can be reached on (571) 272-1189. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/KHANH NGUYEN/  
Primary Examiner, Art Unit 1791

/SAEED M. HUDA/  
Examiner, Art Unit 1791